# AWARENESS AND ATTITUDE TOWARDS CONSERVATION OF ENVIRONMENT AMONG POST GRADUATE STUDENTS

#### Dr. Navleen Kaur

Associate Professor, Department of Community Education & Disability Studies, Panjab University,

Chandigarh

And

## Navneet Kaur

Master's Student, Department of Community Education & Disability Studies, Panjab University, Chandigarh

## Abstract:

Since the ancient time, there has been a sensitive balance between the human world, plantation and environment. But for the attainment of ultra comforts of life and the irresistible greed of comfort, the commodities are dismantling that ecological balance. Therefore, there is a great need to protect and preserve our environment. The study was conducted on randomly selected 100 post graduate students of humanities from different departments of the Panjab University, Chandigarh which comprised 50 female students and 50 male students. The main objectives were (i) To study the Attitude and Awareness level of students towards environment. (ii) To study the effect of gender of students on Awareness and Attitude towards the environment was made by the investigator as a tool for collecting the data. Mean, frequency and percentages were used as statistical techniques to analyse the collected data. The results of the study concluded that there is insignificant difference between the knowledge of male and female students regarding the environmental issues. The study may prove very useful in assessing the knowledge of youth and at the same time promoting their awareness about the environmental conservation. Finally, the study provides succinct suggestions towards conservation of environment for sustainable development.

Key Words: Awareness, Attitude, Environment, Conservation

#### Introduction

Human's quest for improving the quality of life through the interactive process with nature is an ongoing phenomena. Scientific and technological achievements are enabling mankind to control and transform the natural environment to suit its needs and demands. Indiscriminate use of this capability, however, has created a situation threatening the existence of humanity itself. Due to the pressures of over consumption, irresponsible nature of human, greed, population and technology, the biophysical environment is being degraded. As many of the human activities, such as usage of cooling and refrigeration applications, give rise to greenhouse gases in the atmosphere. This in turn causes global warming and melting of the glaciers. Flooding, rising sea level, vanishing coral reef, portable water shortage are the major negative impacts of melting glaciers. Changing climate is forcing people, animals and birds to migrate and affect the agriculture badly (such as, early flowering of plants). What is required is recognition of the need for both development and proper management of the environment. Major emphasize can be made on making individuals aware of the finite resources available and their usage along with the knowledge regarding the environmental issues and measures that can be taken. This will help in creating supportive and sustainable environment.

The global ecological environment has deteriorated seriously since the start of the Industrial Revolution. The most disastrous effect is rapid degradation of our natural resources. Population explosion has worsened this

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situation. Environment is the combination of external physical conditions that affect and influence the growth, development and survival of organism (Hooda, 2016). But gradually environment ethics from the whole population has become low. Nowadays global environment is passing through various activities of pollution. One of the most crucial problems facing the mankind today is the preservation of the environment, which has received the attention of the world populace (Sumenjeet, 2004). The growing concern with environmental issues and their impact on general awareness is one of the most noticeable phenomena of the last two decades (Sivamoorthy et al, 2013). Environmental education has recently been included in curricula in India to improve understanding of ecosystems, their functions, and the effect of human actions on them. The problems of deforestation and soil pollution are the outcome of unnecessary increase in the population. In view of the expenditures by public agencies, such as the Soil Conservation and the Agricultural Conservation Program, this type of analysis is a contribution if it increases soil conservation accomplishment funds expenditure (Blase and Timmons, 1960).

#### Environment

The concept of environment is complex and comprehensive because of several factors influencing it. It is not merely the air, water and soil that form our environment but also the soil and economical conditions of our life. It is defined as the aggregate of all external conditions and influences the life and the development of an organism, human behaviour or society. The internal and external environments comprise the total environment. For descriptive purposes, environment has been divided into components, viz. physical, biological and psychosocial, all closely related. The concept of total global environment is the product of convergence of many forces – industrialisation, the effects and dangers of weapons of mass destruction, with overall global technological advancements which make communication, ecological studies of nature and man-made environment easier than thought earlier. The environment in which we live has been moulded and re-created in accordance with human motivations, faith and preference (O'riordan, 1971). India is a nation of mega diversity and some of the highest rural human population densities on earth (Heinen and Shrivastav, 2009).

#### **Environmental Issues**

The harmful effects of human activity on the biophysical environment are categorised as Environmental Issues. Environmental protection is a practice of protecting the natural environment on individual, organizational or governmental levels, for the benefit of both the environment and humans. According to report from the UN office for the coordination of Humanitarian Affairs "The amount of greenhouse gas in the atmosphere is already above the threshold that can potentially cause dangerous climate change. We are already at risk of many areas of pollution...It's not next year or next decade, it's now."

**Greenhouse Gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases are water vapour, carbon dioxide, methane, nitrous oxide and ozone. Without greenhouse gases, the average temperature of Earth's surface would be about  $-18^{\circ}$ C (0°F), rather than the present average of  $15^{\circ}$ C (59°F).

The **carbon dioxide**, one of the greenhouse gases (GHG) in the atmosphere has already exceeded 400 parts per million (NOAA). (Intergovernmental Panel on Climate Change Report) This level is considered a tipping point.

The effects of **global warming** are the environmental and social changes caused (directly or indirectly) by human emissions of greenhouse gases. There is a scientific consensus that climate change is occurring, and that human activities are the primary driver. Many impacts of climate change have already been observed,

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including glacier retreat, changes in the timing of seasonal events (e.g., earlier flowering of plants), and changes in agricultural productivity.

**Climate change** is altering the pattern of life on the planet, causing widespread species extinction, migration and behaviour changes. A changing climate forces plants and animals to migrate in order to survive. However, research has shown that most plant species are able to migrate at only 1/10<sup>th</sup> of the speed required to keep up with human-induced climate change.

Although **glaciers' melting** is a natural process, but the melting of glaciers today is taking place at a faster speed than normal. A major cause of melting glaciers is found to be global warming. The rapid rate of melting has serious negative impact on the earth.

#### **Definitions:**

Awareness: According to Oxford Learner's Dictionary, Awareness is knowing something; knowing that something exists and is important; being interested in something.

**Attitude:** According to Oxford Learner's Dictionary, the term Attitude is defined as, The way you think and feel about someone or something; A feeling or way of thinking that affects a person's behaviour; A way of thinking and behaving that people regard as unfriendly, rude, etc.

**Youth:** The United Nations, for statistical purposes, defines youth as those persons between the ages of 15 and 24 years.

**Conservation:** The word conservation has been derived from the verb "to conserve" defined in Webster dictionary as "to keep in a safe or sound state". Conservation itself is in the same place defined "as a careful preservation and protection of something; especially planned management of natural resources to prevent exploitation, destruction, or neglect."

**Conservation of Environment:** "Environmental Conservation" is a broad term for anything that furthers the goal of making life more sustainable for the planet. Ultimately, people want to help the planet survive naturally and with no negative impact from the human race.

## **Review of Literature**

**Yasmeen (2003)** found that despite widespread water scarcity, deforestation, pollution and global warming having being transformed into everyday realities, environmental education in schools and colleges across the country is limited in its content and reach. There is also wide spread dispute about its contours and content. He suggested that environmental studies need to be expanded to cover the development choices we make as a nation. Further, children should be made to realize they are the part of problem and they should be the part of solution. While proposing that the best way to create a deep awareness in studies of the importance of nature is by encouraging them to maintain their own gardens and to plant and nurture trees and herbs in their schools and campus.

**Gihar (2006)** has studied the environmental responsibility among students in relation to their sex (male and female), locality (rural and urban) and subject stream (science/arts/commerce). Male students were having higher environmental responsible behaviour than the female students. The students of science background were having higher environmental responsible behaviour than the students of arts and commerce stream.

**Sengupta, Das and Maji (2010)** undertook a study that showed that stream is source of variation in case of environment related behaviour but gender does not. Study shows environmental awareness has a broad meaning. It not only implies knowledge about environment but also values and necessary skills to solve environmental problems. Moreover, environmental awareness is the initial step ultimately leading to the ability to carry on responsible citizenship behaviour.

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**Sivamoorthy et al (2013)** focused on environmental awareness and practices related to various factors like causes of pollution, conservation of soil, forest, air, etc., energy conservation, conservation of human health, conservation of wild life and animal husbandry. The study is quantitative in nature. It reveals that the level of awareness is high among the respondents irrespective of gender difference but in practice level there is difference between genders i.e. males practicing more than females. This research attempted to describe how environmental awareness and practices can be utilized as a tool for sensitizing the young students about environmental protection.

**Panth, Verma and Gupta (2015)** explored undergraduate students' attitudes towards environment at the end of the course "Environment, Human, and Society". As a result of the study, it could be concluded that undergraduate students had positive attitudes towards the environment as regard to their gender and faculty types. The data was collected from 100 students. The data was divided into two groups on the basis of Environmental Awareness and Environmental Attitude. It was emphasized that female students were more sensitive towards environment than male students.

**Rizwana and Pallvi (2015)** studied the awareness and attitude of Post Graduate students towards environmental issues. The study was based on primary data and the sample of 75 respondents for pilot study was selected through convenience sampling technique. The PG students of MSRIT were selected as a sample for the study. The study found that majority of the students were interested to know about the significance of environmental sustainability and were also willing to help the society to acquire basic understanding of environmental protection.

Ali (2016) conducted a study to check environmental awareness among the students of technical courses. Study showed remarkable difference between the environmental awareness of male and female. Environmental awareness of females was higher than the male students of the technical courses.

**Hooda (2016)** conducted a study on awareness of college students towards environment. The total data of study was 120 students of private and government colleges of Faridabad. The result showed that the students of private colleges were more positive in their attitude towards environmental awareness than the students of government colleges.

## **Objectives**

1. To study the Attitude and Awareness level of students towards environment.

2. To study the effect of gender of students on Awareness and Attitude towards environment.

## Methodology

Descriptive method of research was used for the present research work. The survey research was conducted in Panjab University Chandigarh among 100 students from different departments. An exploratory study was carried out to obtain insight into student's perceptions of environment.

#### Sample

The study was conducted on randomly selected 100 students of humanities from different departments of the Panjab University, Chandigarh, out of which 50 were female students and 50 were male students.

## **Tool Used**

Self constructed Multiple Choice questionnaire was made by the investigator as a tool for collecting the data. The questionnaire had the questions regarding the environmental awareness and attitude towards the environment.

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## **Collection of Data**

Data was collected using Random Sampling technique. Questionnaire was distributed to the male and female students of the Panjab University. They marked the answer as per their attitude towards the environment.

## **Statistical Technique**

Mean, frequency and percentages were used as statistical techniques to analyse the collected data.

## Data Analysis and Interpretation of Results

The scores were divided into three categories Low, Medium and High. Low contains the number of male/female/both respondents who had scored less than 10 marks. Medium contains the count of male/female/both respondents who had scored more than 10 and less than 20. High contains the count of male/female/both respondents who had scored more than 20. Frequency column contains the count of respondent in that category. Percentage Column contains the percentage.

Rank	Frequency	Percentage	Cumulative Percent
Low	2	4	4
Medium	14	28	32
High	34	68	100
Total	50	100	

Table 1: Shows the Environmental Knowledge of the Male Students (N=50)

The above table shows the categorical count of the scores obtained by the male respondents. There are 2 respondents' who fall under the category of Low with 4 percent. 14 are counted in the category of Medium with the percent of 28% and 34 fall under the category of high with percentage 68%. The number of respondents under the high category is more than medium. So, majority of the male respondents have high awareness in university.

Rank	Frequency	Percentage	Cumulative Percent
Low	0	0	18
Medium	17	34	86
High	33	66	100
Total	50	100	

Table 2: Shows the Environmental Knowledge of the Female Students (N=50)

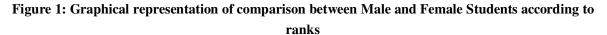
The above table shows the categorical count of the scores obtained by the female respondents. No female respondent falls under the category of Low. 17 are counted in the category of Medium with the percent of 34% and 33 fall under the category of high with percentage 66%. The number of respondents under the high category is more than medium. So, majority of the female respondents have high awareness in university

Rank	Frequency	Percentage	Cumulative Percent
Low	2	2	2
Medium	31	31	33
High	67	67	100
Total	100	100	

The above table shows the categorical count of the scores obtained by the respondents. There are 2 respondents who fall under the category of Low with the percentage of 2%. 31 are counted in the category of

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Medium with the percent of 31% and 67 fall under the category of high with percentage 67%. The students with higher level of environmental awareness made the largest count of 67 out of 100 total respondents with the percent of 67%. Thus, data from the study revealed high level of environmental awareness among the university students with the 67% total. When compared with the cumulative percent of those students within both low and medium level of environmental awareness of 33%, it can be concluded that, the study revealed high environmental awareness among the post graduate students.



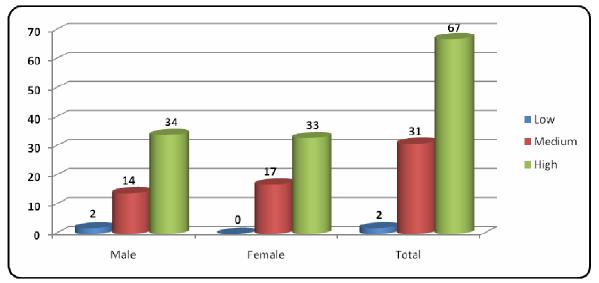
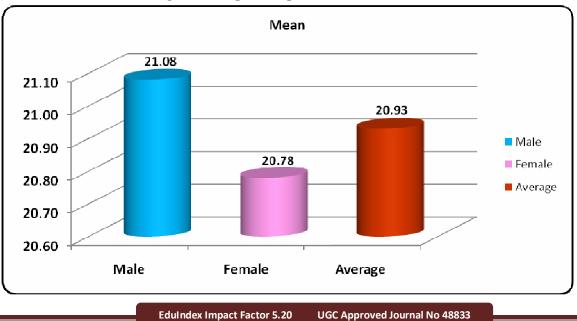


 Table 4: Mean of the scores obtained by the male and female students

	Male	Female	Total
Mean	21.08	20.78	20.93



## Figure 2: Graphical representation of Mean scores

The mean of scores obtained by the male and female students is 21.08 and 20.78 respectively. Average of the two mean is 20.93. From the table, it can be said that there is insignificant difference between the knowledge of male and female respondents regarding the environmental issues. But that much of awareness, for both male and females, is not enough to control the bad impact of human activities on the environment.

## Conclusion

The study surveyed and investigated university students` Environmental awareness level as well as attitudes towards the Environment. Results from the study revealed that a significantly higher proportion of students exhibited high awareness level by 67% of the total sampled population. In the contrary, the study also revealed that, in spite of high level of knowledge and awareness on environment, respondents were unable to give appropriate answers to the questions that are related to the critical issues of the environment. They are less aware regarding the precautionary measures to be taken in all human activities to prevent the environment from the bad impact of human activities.

From the results, insignificant difference can be seen between the level of environmental knowledge of male and female. Both male and female failed to give correct answers regarding critical issues such as which human activities are speeding up the global warming, why sea level is rising, what are the effects of the global warming, which rays are trapped by the earth due to depletion of ozone etc. In other words, results from the study imply that, students being aware about their surroundings and having knowledge about their environment is not enough if they don't participate in environmental protection activities. Even though environmental studies has been made compulsory in the graduation by the government of India, still the students are not practically aware of the activities they should avoid to protect the environment.

#### Suggestions

To protect and conserve the environment, emphasis should be given on Environmental Education in both formal and non-formal system of education. In formal system of education, teachers play a very significant role in developing a greater awareness about environment among students. This may bring radical change among the students in the way of thinking, living and working. The precautionary measures that should be taken at individual level to preserve the environment and tackling with the issues such as global warming, ozone depletion are:

- Less use of air conditioners
- Car pooling to reduce the level of carbon monoxide in atmosphere
- Effective and smart use of natural resources
- Afforestation
- Use of energy labelled electronic appliances
- Recycling the plastic
- Less use of pesticides in crop
- Stop setting the crop waste on fire
- Effecting use of water
- Less use of fossil fuels

It is universally agreed that environmental education should be interdisciplinary, drawing from biological, sociological, anthropological, economic, political and human resources. It is also agreed that a conceptual approach to impart environmental education is always best. Students can be made aware regarding conservation of environment by:

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- **Promoting environmental awareness** among schools, grass-root level organization and the general public.
- Strengthening capacities of educators and practioners (teachers, local NGOs) in the field on environmental education by providing technical support and educational resources.
- Understanding the major environmental issues facing India today and developing innovative solutions.
- **Promoting conservation of nature and its resources** by emphasizing on the conservation of ecological traditions of India.

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